# GENERALLY ACCEPTED AGRICULTURAL AND MANAGEMENT PRACTICES FOR PRIVATELY-OWNED CERVIDAE

### MANAGEMENT OVERVIEW

The Michigan Animal Industry Act, P.A. 466, describes captive cervidae (commonly known as privately-owned cervidae, or cervids) as members of the cervidae family, including but not limited to deer, elk, moose, reindeer, and caribou, living under the husbandry of humans. Because of their unique behavioral characteristics, a high degree of skill and sensitivity needs to be exercised when raising cervidae in captivity. Cervids are generally more difficult to tame than other domestic species and, therefore, have special management, environmental, facility, and health care requirements. Though exact husbandry systems may vary by species and/or location, all farmed deer require adequate nutrition, shelter, holding/handling facilities, and health management.

### MANAGEMENT PRACTICES

**Handling:** Handling cervidae requires care and caution to minimize undue noise and/or commotion to avoid over-excitement of the animals. To minimize stress, handling should occur as infrequently as possible. Routine management procedures such as weighing, identification, vaccination, and anthelmintic (dewormer) administration need to be carefully scheduled and performed simultaneously when feasible. To decrease the chance of animal or human injury during handling, antlers may be removed before the onset of rut. Handling equipment designed specifically for use with privately-owned captive cervidae should be used.

**Nutrition:** Adequate feed and water are vital to farmed cervidae. Access to clean, fresh drinking water is essential. Nutritional requirements vary both between and within species. There are differences between those species that are primarily grazers and those that prefer to browse. Within species, nutritional requirements differ among adult males, adult females, and growing animals. In addition, seasonal variation exists within each of these animal classifications.

**Reproduction:** Reproductive characteristics vary somewhat between cervidae species, but all are highly seasonal. Important management considerations to achieve good reproductive performance include: Paddock size and female:male ratio during breeding; aggressive behavior by males in the rut; normal parturition (birthing) behavior; environmental needs of newborns; and special requirements at weaning. Information from veterinarians, experienced individuals and/or reliable published sources can be valuable (see references).

**Transportation:** Transporting cervidae successfully requires specific attention to several important details. Cervids should be separated according to species, age, and sex when handling or transporting. Quiet handling and darkened transport crates or trailers tend to aid in successful transport of cervids. Adequate ventilation is required in trailers. Feed and water need to be available if transporting cervids for over 12 hours. Extra caution should be exercised in transporting the following cervidae:

- 1) males with antlers in velvet;
- 2) females due to give birth within two months; and
- 3) lactating females and offspring when those fawns/calves are less than one month of age.

Finally, transportation of cervidae should be avoided in extremely hot weather to minimize associated stress.

# RECOMMENDATIONS FOR THE ENVIRONMENT

Farmed cervidae can be successfully raised under a wide variety of systems. Their environmental needs vary from those of major livestock species based mainly on their behavioral differences. Accordingly, requirements often differ among individual cervidae species. For example, paddock size and stocking density should be determined by species preference toward social and gregarious behavior, and the relative proportions of open pasture and forested land should be based on species preference for browsing vs. grazing. Cervidae must become habituated to their environment, and disruptions by people, other animals, or machines should be minimized. Newborn cervidae require cover for hiding and shelter from inclement weather in some situations. Though most cervidae are quite tolerant of climatic fluctuations, provision of shelter to temper climatic extremes can be beneficial. As with other aspects of cervidae farming, environmental design should utilize expert input.

# **FACILITIES AND EQUIPMENT**

For the most part, the facilities and equipment needed for cervidae farming are dictated by the requirements in handling, nutrition, reproduction, transportation, and environment. Fences should be built in accordance with the *Operational Standards for Privately-Owned Cervidae*, and sharp protrusions in the confined areas should be strictly eliminated.

# **HEALTH CARE AND MEDICAL PROCEDURES**

In managing the health of farmed cervidae, aggressive prevention of disease and injury is vital. Success with both prevention and treatment is more likely if a veterinarian skilled in cervidae management is involved. Adherence to regulatory requirements must be observed in the transport and transfer of cervidae. Development of a herd-specific health management program in consultation with a local veterinarian is recommended. This program should incorporate routine herd health evaluations

appropriate for the particular management, environment, and facilities involved. Vaccination, anthelmintic administration, antler removal, and other health management practices can then be appropriately executed in a timely manner.

### REFERENCES

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